Mission Orientated Protective Posture (MOPP)

& CBR defense bill

Lesson topic 4.5

Enabling Objectives

- Describe the different levels of protection associated with Mission Oriented Protective Posture(MOPP)
- State the purpose of the Chemical, Biological, and Radiological Defense Bill
- Identify personnel responsibilities for Chemical, Biological, and Radiological Defense

MOPP

- Purpose
  - Enhance the survivability of ship's crew
  - Sustain shipboard operations critical to fulfilling the mission
  - Management tool which coordinates individual collective protection activities & shipboard systems into effective countermeasures

MOPP

- Provides for incremental preparations to defend against CBR attacks
- Provides incremental application of increased protection to counter minimum to maximum levels of CBR environments
- Implementation of MOPP levels must be the result of threat/risk assessment

Chemical, Biological & Radiological Defense Responsibilities

- Commanding Officer
  - Establishes Maximum Permissible Exposure
  - Direct & coordinate the training of ship's crew & embarked personnel
  - Designate the appropriate MOPP level

Chemical, Biological & Radiological Defense Responsibilities

- Executive Officer
  - Direct & coordinate the training of ship's crew
  - Supervise accomplishment of preparatory measures prior to a CBR attack
- Officer of the Deck
  - Familiar with CBR-D procedures
  - Record avoidance & countermeasures activities

Chemical, Biological & Radiological Defense Responsibilities

- Operations Officer
  - Principal advisor to the CO regarding potential or actual CBR hazards
  - Maintain plots of predicted & actual CBR hazard areas
  - Keep DCA informed

Chemical, Biological & Radiological Defense Responsibilities

- Embarked aviation Units
  - Appoint CBR-D officer
  - Assign embarked personnel to decon teams
  - Air-specific decon training

Embarked units should have their own CBR personnel protective clothing & aircraft decon supplies

Chemical, Biological & Radiological Defense Responsibilities

- Engineering Officer
  - Supervise & direct the DCA
  - Instruct engineering personnel in the use of individual protective equipment
  - Direct decontamination & repair of engineering spaces

Chemical, Biological & Radiological Defense Responsibilities

- Damage Control Assistant
  - Responsible for CBR-D bill
  - Advise the CO on CBR-D
  - Supervise CBR-D training of crew
  - CBR-D coordination with embarked units
- Department Heads
  - Assist DCA on maintaining CBR-D readiness
  - Coordinate assignments of personnel
  - Training of all personnel in department

Chemical, Biological & Radiological Defense Responsibilities

- Division Officer
  - Principal assistants to DCA in division
  - Appoint divisional DCPO for CBR-D training
  - Ensure good hygiene & sanitation

Chemical, Biological and Radiological Defense Bill

- Purpose, provide guidance in defense measures prior to a CBR attack
- Methods to be used in minimizing damage & personnel casualties
- Contains preparatory & active measures

Preparatory measures

- Proper inoculations
- Cleanliness of the ship
- Self/buddy aid procedures
- Pre-attack activation of CMWDS
- Material condition of readiness
- Minimizing exposure

Active measures

- Immediately following a CBR attack
  - Maneuvering of ship
  - Activation of CMWDS continuously
  - Decontamination of personnel & equipment
  - Prompt & accurate detection & prediction of contaminated areas

Risk assessment

- Risk is the assessed difference between the threat level & activation of appropriate levels of shipboard countermeasures
- Risk analysis begins with intelligence information which describes the threat

Intelligence information

- CBR warfare capability in area
- Assessment of the political will
- Strike ranges of known delivery systems
- Threat axis & potential attack patterns
- Estimated time of arrival

Risk assessment threat levels

- Level 1 suspected
  - Possession of CBR capabilities by an adversary with delivery systems in the operational area constitutes a suspected threat
  - Implementation of MOPP-1 countermeasures

Risk assessment threat levels

- Level 2 possible
  - Assessed political will of an adversary to utilize CBR warfare increases the threat
  - Implementation of MOPP-2 countermeasures

Risk assessment threat levels

- Level 3 probable
  - Statements of intent to employ CBR warfare
  - Changes to political or military posture of an adversary possessing CBR capabilities
  - Use of CBR warfare within operational area
  - Implementation of MOPP-3 countermeasures

Risk assessment threat levels

- Level 4 imminent
  - Confirmation of increased activity involving delivery systems
  - Recognized platform attack patterns
  - Electronic or visual indication of employment
  - Implementation of MOPP-4 countermeasures

Risk management & implementation of MOPP

- Decision to initiate/upgrade ship's MOPP begins with the determining threat level
- Increase on threat level doesn’t justify immediate implementation of all countermeasures
- Next step is determine time which MOPP countermeasures should be implemented

Risk management & implementation of MOPP

- Implementing countermeasures to early will degrade the crew's performance
- Immediately following attack an assessment of ship's involvement in the CBR hazard is required
- Assessment will determine which countermeasures should remain in effect

MOPP level 1

- MOPP level 1 - attack suspected
  - Individual protective equipment & medical supply are issued to shipboard personnel
  - maintained at respective battle stations
  - Protective masks issued & fitted

Attack suspected

- Chemical protection
  - MCU-2P protective mask
  - CPO/ACPG suit
  - Personnel decon kit, M-291
  - Operational inspection of detection equipment & monitoring systems
  - Threat is assumed as "worst case scenario"

Attack suspected

- Biological protection
  - Protective measures same as chemical
  - No medical supplies
- Radiological protection
  - Mask only
  - Operational inspection of installed detection equipment monitoring systems

Attack suspected

- Other Actions
  - Set Material condition YOKE
  - Set Readiness Condition III
  - Training
  - Review survival standards for CBR-D environments
  - Assign personnel to CBR defense teams

MOPP level 2

- Attack possible
  - Protective mask worn on person
  - Pre-position CBR-D equipment
  - Operationally test CMWDS
  - Operationally test alarms
  - Radiological only, issue dosimeters
  - Training

Attack possible

- Other Actions
  - Designate primary/secondary CCA & decontamination stations
  - Set Material Condition ZEBRA (modified)
  - Conduct threat brief on enemy capabilities
  - Review shipboard procedures for handling of contaminated casualties

MOPP level 3

- Attack probable
  - Install new canister on MCU-2P
  - Activate CMWDS intermittently
  - Weather deck activities require wet weather gear
  - Activate Collective Protection System (CPS)

Attack probable

- Chemical protection
  - Don CPO/ACPG with hood down
  - Initiate NAPP
  - M-291 stowed in mask carrier, medical supplies are stored in jumper cargo pocket

Attack probable

- Biological protection
  - Same as chemical, - medical supplies & NAPP
- Radiological protection
  - Don battle
  - Warm up & test all RADIACSs
  - Ready shelter

Attack probable

- Other Actions
  - GQ
  - Set Material Condition ZEBRA
  - Activate CCA/decon stations

MOPP level 4

- Attack imminent
  - Set Circle WILLIAM
  - Activate CMWDS continuously
  - Chemical/biological, secure jumper hood over head & around mask
  - Don protective glove set
- Radiological
  - Don battle dress
  - Monitor radiation detection equipment

Attack imminent

- Other Actions
  - Set GQ (if not already)
  - Mandatory water drinking regimen
  - Set MPE & casualty dose
  - Ready & deep shelter

Review and Summary

- Purpose of MOPP levels
- Responsibility of personnel
- Risk assessment
- Risk management & implementation of MOPP levels

- CBR Defense Bill
- MOPP levels
  - MOPP 1
  - MOPP 2
  - MOPP 3
  - MOPP 4